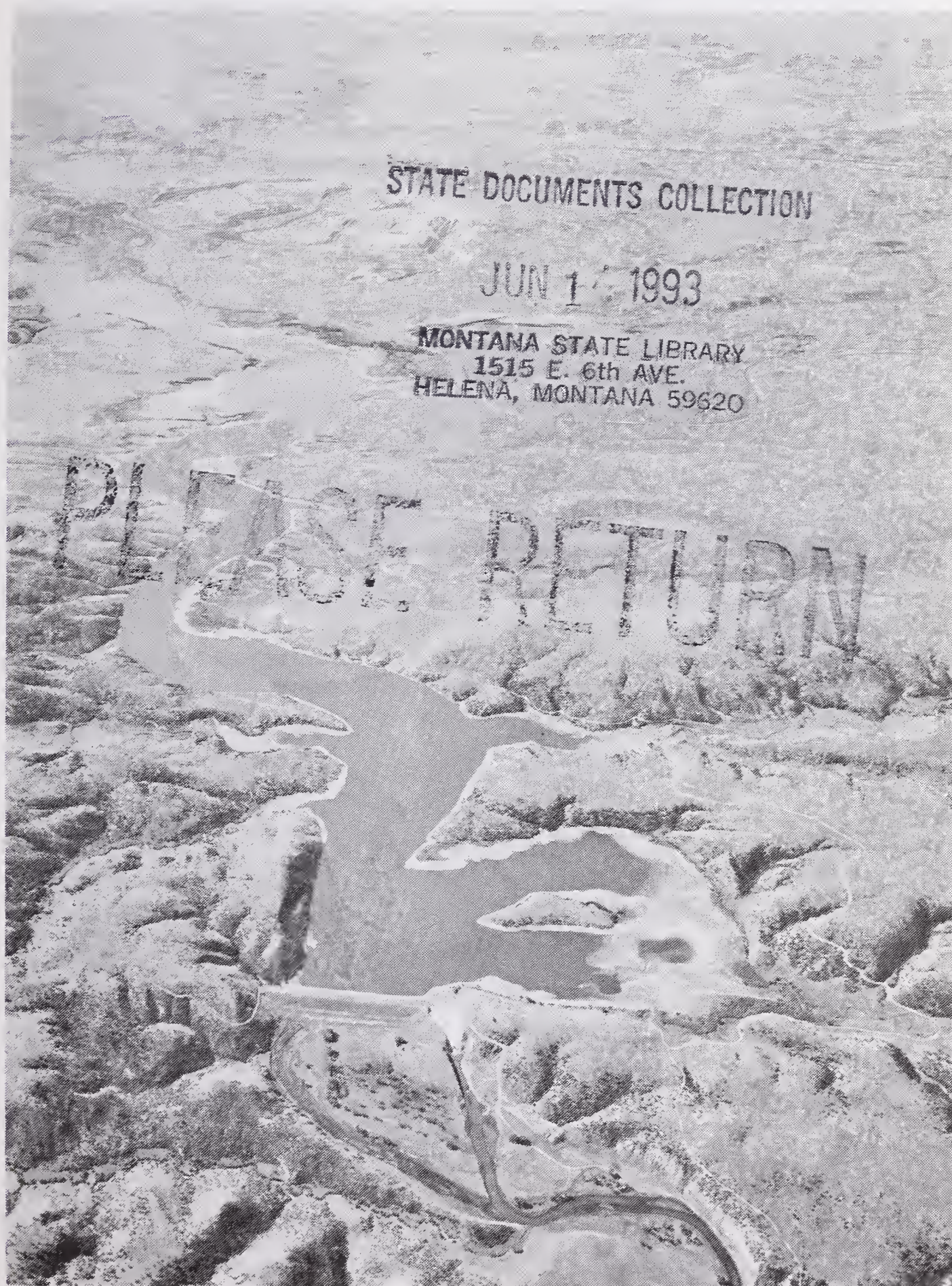


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# EPAIR AND ENLARGEMENT = TONGUE RIVER DAM AND THE SETTLEMENT OF THE NORTHERN CHEYENNE TRIBE RESERVED WATER RIGHT



ENVIRONMENTAL SCOPING DOCUMENT





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The Northern Cheyenne Tribe and the State of Montana have entered into the Northern Cheyenne - Montana Water Rights Compact which quantifies and permanently allocates the Tribe's Federal reserved water rights. The Compact, under the title "Northern Cheyenne Indian Reserved Water Rights Settlement Act of 1992" (Settlement Act) was signed into law by former President Bush on September 30, 1992. The Settlement Act instructs that National Environmental Policy Act (NEPA) compliance activities be completed prior to the implementation of the various aspects of the Act.

## **PURPOSE AND NEED**

The purpose of this action is to provide for the implementation of certain aspects of the Settlement Act. The actions being evaluated at present include the proposed repair and enlargement of the existing Tongue River Dam, potential uses of the Tribal water, and enhancement of fish and wildlife resources and habitat in the Tongue River Basin. Implementation of these aspects of the settlement is the first step toward complete execution of the Settlement Act.

The proposed Tongue River Dam Project serves to secure the existing Tribal contract water supply, provide an additional 20,000 acre-feet of storage for the Tribe, and allow the state to correct the existing dam safety inadequacies.

The Tongue River Dam was completed in 1939 and was designed to accommodate a flood flow of 98,000 cubic feet per second (cfs). However, the reinforced concrete spillway in the left abutment could fail during an outflow of 13,000 to 16,000 cfs. (The moderate flood flow in 1978 inflicted approximately \$1,000,000 in damage to the spillway.) In addition to being classified as high hazard, the dam has been declared unsafe by the U.S. Army Corps of Engineers due to the inadequate spillway capacity.

## **THE REGULATORY SETTING**

Procedures governing the environmental compliance process for this action are defined in administrative rules implementing the National Environmental Policy Act of 1969 (NEPA) and the Montana Environmental Policy Act of 1971 (MEPA). Those laws require that an interdisciplinary environmental review be conducted for any action taken by a federal or state agency that may significantly effect the quality of the human environment.

The Montana Department of Natural Resources and Conservation (DNRC), the U.S. Bureau of Reclamation (Reclamation), the U.S. Bureau of Indian Affairs (BIA), and the Northern Cheyenne Tribe (Tribe) will act as cooperators in conducting the environmental compliance activities. Reclamation has been designated as the lead Federal agency for NEPA compliance activities related to the Tongue River Dam Project and the Tribal water supply from Yellowtail Dam. BIA is designated as lead Federal agency for all other aspects of the Settlement Act.





Spillway flow during 1978 flood.  
Note erosional damage behind downstream wingwalls.



## **ENVIRONMENTAL COMPLIANCE PROCESS**

At present, the main focus of the environmental compliance activities will be the site-specific evaluation of the effects of the proposed Tongue River Dam Project and the evaluation of all reasonable alternatives to that action. Also addressed, on a programmatic basis, will be certain aspects of the Settlement Act related to use of the Tribal water right of the additional water provided by the Tongue River Dam Project and use of the Tribal water allocated from Yellowtail storage. Site-specific evaluation will take place for these actions after definitive plans for the use of the water and related development activities are formulated by the Tribe.

## **PROPOSED ACTION**

The State of Montana and Reclamation propose to replace the existing, unsafe spillway with a new labyrinth weir spillway having a crest four feet higher than the existing spillway thereby raising the reservoir level four feet. This alternative would also involve the rehabilitation of the low level outlet works. This construction alternative provides the opportunity to alleviate the dam safety problems at Tongue River Dam and to store additional water.

## **ALTERNATIVES**

In the past, many alternatives for repair, enlargement, or replacement of the existing dam have been studied. These alternatives include new dams at downstream sites (Oxbow, Post Creek, High Tongue) and a higher dam (various elevations up to 3465 feet) at the current location.

In addition to the proposed Tongue River Dam Project all reasonable alternatives will be evaluated that meet the basic intent of the Settlement Act to provide 20,000 acre-feet of water to help meet the Tribe's reserved water right and provide for repair of the unsafe Tongue River Dam.

A "No Action" alternative and an alternative to breach the dam will also be addressed.

## **POTENTIAL IMPACTS OR AREAS OF IMPACT**

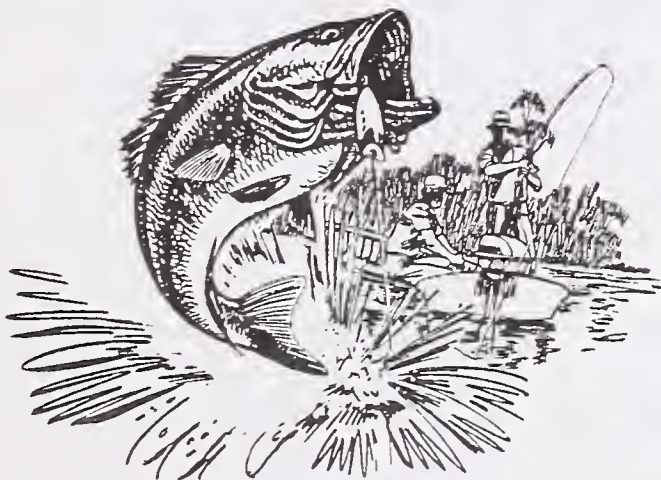
The first priority of environmental analysis and compliance is to seek ways to avoid impacts to the environment. When impacts are identified that cannot be avoided, the goal becomes minimization and mitigation of those impacts. The potential environmental impacts of the spillway reconstruction and the impacts to the newly inundated area around the reservoir have been identified as follows:

Construction: Agency scoping has determined that there would be short-term impacts during the period of spillway reconstruction. Potential areas of impact

are water quality, air quality, and noise. There would also be short-term impacts due to the lowered reservoir levels during construction. These impacts include the loss of recreational opportunities, potential impacts to the reservoir and downstream fisheries and loss of storage water to downstream irrigators.

**Inundation:** Raising the reservoir and inundating new land around the perimeter of the reservoir would have long-term impacts that would be mitigated. A four-foot raise in the reservoir pool would inundate an additional 414 acres. This land includes riparian areas at the upper end of the reservoir and most of the existing campgrounds. The loss of riparian habitat would likely be mitigated by establishing or managing new habitat in the area of the project. The recreation facilities would be replaced in or near the existing area or moved to a new location. The new high water line would require the relocation of portions of the county road along the west shore of the reservoir. Inundating new land has the potential to disturb historic as well as prehistoric cultural resources. Studies are currently underway to identify and determine the significance of any sites that may be impacted. Those studies indicate that few sites would require mitigation.

**Fish and Wildlife:** Impacts to the reservoir fishery would be confined to the construction period. Certain species would be restocked in the reservoir following construction. The downstream fishery could also be impacted due to changes in flow patterns during construction. The river below the reservoir would be monitored after construction and certain species restocked if necessary. The potential exists to enhance downstream, springtime flows critical to fish migration and/or spawning. Impacts to wildlife are expected to be minimal with no impact to Threatened and Endangered Species. Existing wetlands that would be impacted would be mitigated, probably on site. Both on and off-site fish and wildlife enhancement opportunities are being explored. Enhancement funding in the amount of \$4,600,000 is available for this purpose.



**Coal Mines:** The Decker Coal Company mines at the upper end of the reservoir would be impacted by the increased reservoir elevation. The extent of those impacts has been evaluated in a separate study. Information from that report will be incorporated into the environmental analysis and those impacts would be mitigated.



## **RELATED ACTIONS**

Possible environmental impacts resulting from the potential uses of the Tribe's water will be dealt with in a broad sense in the environmental compliance document. BIA will be responsible for site-specific NEPA compliance as actual uses for the water are proposed. Officials from BIA will be available at the public scoping meetings to answer questions and take comments regarding the potential environmental impacts of the use of the Tribe's water.

## **OTHER POTENTIAL ENVIRONMENTAL IMPACTS**

Identification of environmental issues and the suggestion of reasonable alternatives are being solicited from all interested parties. If you feel you know of a potential issue or possible alternative that has not been mentioned, please let us know by attending one of the public scoping meetings or by contacting the Department of Natural Resources and Conservation at the following address and phone number. DNRC will accept written suggestions on issues to be considered in the environmental analysis until April 1.

John Sanders, Tongue River Project Manager  
Department of Natural Resources and Conservation  
1520 East Sixth Avenue  
Helena, MT 59620  
(406) 444-6646

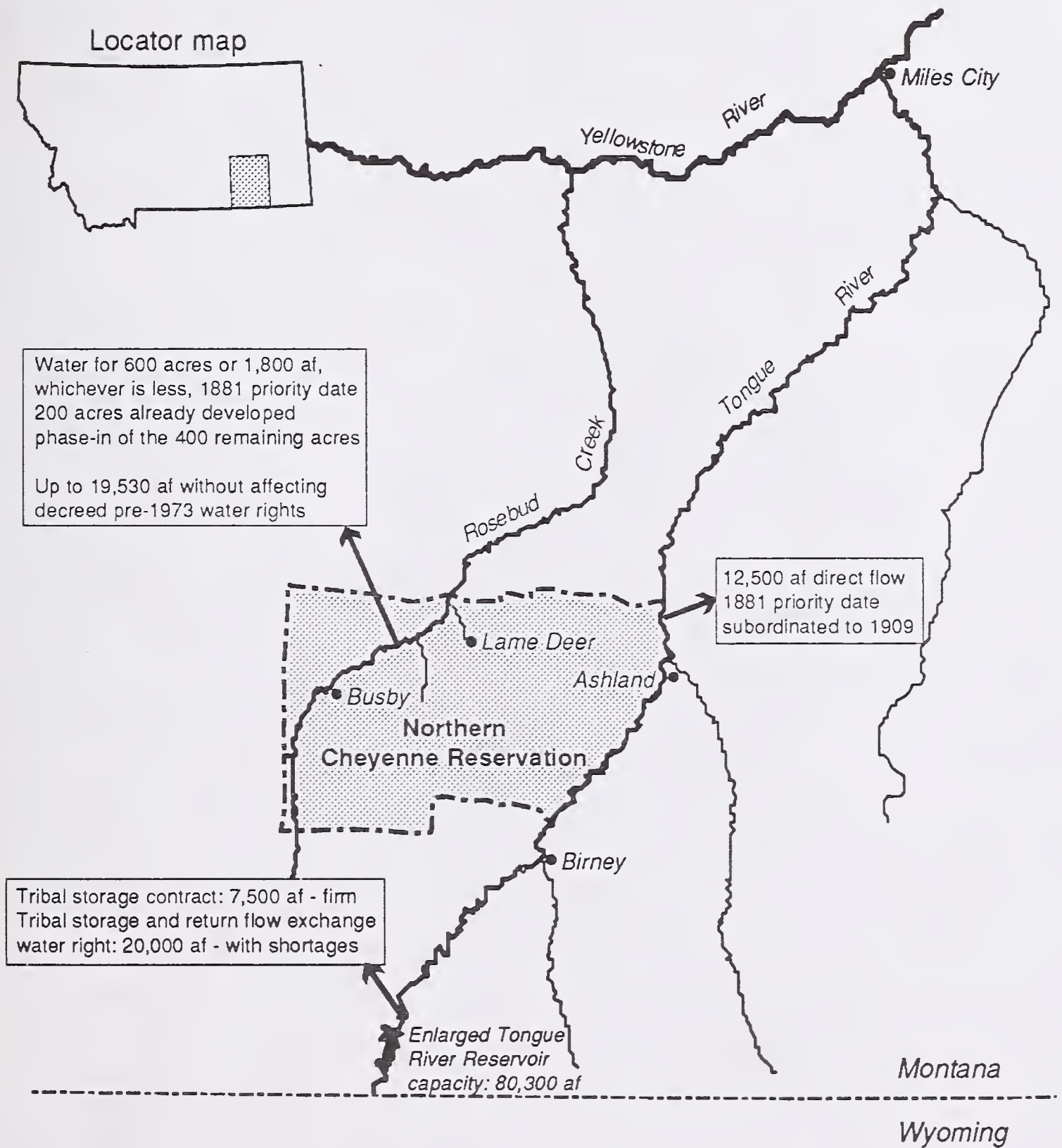
## **PUBLIC MEETING SCHEDULE**

The public is invited to attend any of the following meetings:

- **BUSBY** Monday, Mar. 8 @ 4 p.m. in the School Auditorium
- **LAME DEER** Monday, Mar. 8 @ 8 p.m. at Tribal Headquarters
- **CROW AGENCY** Tuesday, Mar. 9 @ 2 p.m. in the Tribal Building  
Conference Room
- **SHERIDAN, WY** Tuesday, Mar. 9 @ 8 p.m. in the Holiday Inn
- **BIRNEY** Wednesday, Mar. 10 @ 3 p.m. in the School Library
- **BIRNEY VILLAGE** Wednesday, Mar. 10 @ 7 p.m. in the Catholic Church  
Basement
- **ASHLAND** Thursday, Mar. 11 @ 7 p.m. in the St. Labre Auditorium
- **MILES CITY** Friday, Mar. 12 @ 7 p.m. Room 106 of Miles Community  
College
- **BILLINGS** Tuesday, Mar. 23 @ 7 p.m. in the Holiday Inn

# TONGUE RIVER AREA

## Showing Northern Cheyenne Water Allocation from Tongue River and Rosebud Creek



John Sanders, Tongue River Project Manager  
Department of Natural Resources and Conservation  
1520 East Sixth Avenue  
Helena, MT 59620

FIRST CLASS MAIL